Serial No.: 09/931,736

Filed: 17 August 2001

REMARKS

Claims 1-18 are under examination and all have been rejected.

Information Disclosure Statement

Applicants note that the list of references in the application are considered to

represent very general background sources of ancillary importance and are not

considered relevant art. Thus, these references were not presented in a form 1449 for

consideration.

Rejection Under 35 U.S.C. §112 (Second Paragraph)

Claims 2-8 were rejected under 35 U.S.C. 112, second paragraph, as being

indefinite.

Claims 2-8 were rejected for use of the term "an antibody" without referring the

antibody of claim 1 that is being referred to. Applicant responds by noting that this phrase

meant a chain of the kind found in an antibody. Applicants have clarified this by deleting

the phrase "of an antibody" from each of claims 2, 3, 4, and 8. Claims 5, 6 and 7 have

been canceled.

Claims 14 and 16 were rejected for use of the term "tether." Applicant responds

that the term "tether" is well known in the art and is further defined in the application, at

page 13, lines 13-14, to include a molecular polymer of varying length that effectively

holds the blocked immunoglobulins to the array. Applicant believes this description is

sufficient to convey to those skilled in the art the nature of the structure being disclosed.

12

Serial No.: 09/931,736 Filed: 17 August 2001

Rejection Under 35 U.S.C. §102(b)

Claims 1-4 and 8-18 were rejected under 35 U.S.C. 102(b) as being anticipated by

Dorval et al (U.S. Pat. No. 5,561,045), which ostensibly teaches a blocked

immunoglobulin having an antibody portion and a Protein A portion.

Applicant responds that Dorval does not anticipate the claimed invention in that

Dorval teaches use of an antibody that has a blocked Fc portion to prevent Protein A

binding (see Dorval at column 5, line 64, over to column 6, line 7). In addition, claim 5 is

not anticipated by Dorval. Applicant has amended claim 1 to recite the limitation of claim

5, 6 and 7 as a Markush grouping. Thus, Dorval does not anticipate claim 1, as amended.

Claims 5, 6 and 7 have been canceled.

Claims 1 and 8-10 were rejected under 35 U.S.C. 102(b) as being anticipated by

Sano et al (U.S. Pat. No. 5,665,539), which ostensibly teaches an immunoglobulin having

an antibody portion and a Streptavidin-Protein A portion. Applicant responds that the

invention does not recite use of Protein A-Streptavidin. In addition, claim 1, as amended,

is beyond the scope of Sano, as admitted in the Office Action. Thus, amended claim 1 is

not anticipated by Sano et al.

Rejection Under 35 U.S.C. §103

, A.

. 7

Claims 5-7 were rejected under 35 U.S.C. 103(a) as unpatentable over Dorval and

Sano in view of Cabilly et al (U.S. Pat. No. 4,816,567). The Examiner contends that it

would have been obvious to use an antibody with heavy and light chain variable regions,

as taught by Cabilly, in the inventions of Dorval and of Sano.

Applicant responds that regardless of the kind of antibody taught by Cabilly et al,

the Examiner has failed to show any motivation to combine these references, nor is there

any motivation to do so. Cabilly et al are teaching the production of chimeric antibodies

13

Serial No.: 09/931,736 Filed: 17 August 2001

where a selected antigen binding region has been coupled with a constant region so as to avoid eliciting unwanted immune responses when such an antibody is administered to an animal. Thus, the constant region of the antibody of a mouse antibody may elicit production of antibodies when administered therapeutically to a human. By generating and antibody specific for a given antigen using, say, a mouse antibody and then coupling the antigen specific portion with a constant region, containing the Fc region, from a human antibody, the resulting chimera retains the original antigen specificity but has a human constant region that will not elicit unwanted immunogenic reactions when administered to a human. (See Cabilly et al at column 5, lines 30-35, at column 6, line 65, over to column 7, line 18, at column 30, claim 1 and in the Abstract).

可可提為

ď

Thus, Cabilly is concerned with preparing chimeric and other synthetic antibodies that will not be disadvantageously immunogenic. Conversely, the disclosures of Dorval and of Sano (and the present application) are directed to immunoglobulins useful in *in vitro* assay procedures so that there is no concern for any immunogenic reactions – these immunoglobulins are not for administration to animals. Thus, those skilled in the art would not be motivated to look to Cabilly for the kinds of antibodies useful in Dorval, or in Sana or in the present application because these are analytical reagents where immunogenicity is not a concern. Thus, there is no motivation to combine these references and this ground of rejection is overcome.

No fee is believed due in making this response. The Commissioner is authorized to charge payment of any additional filing fees required under 37 CFR 1.16 associated with this communication or credit any overpayment to Deposit Account No. 03-0678.

Serial No.: 09/931,736 Filed: 17 August 2001

FIRST CLASS CERTIFICATE

I hereby certify that this correspondence is being deposited today with the U.S. Postal Service as First Class Mail in an envelope addressed to:

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Alan J. Grant , Esq.

Fig. 8

Respectfully submitted,

Alan J. Grant, Esq. Reg. No. 33,389

CARELLA, BYRNE BAIN, GILFILLAN, CECCHI, STEWART & OLSTEIN

Six Becker Farm Road Roseland, NJ 07068 Phone: 973-994-1700

Fax: 973-994-1744